

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011620**Date Inspected:** 06-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chan Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** TOWER COMPONENT**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance(QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

Bay #10

This QA Inspector observed the following work in progress:

SMAW in the 3F position for the Tower strut plate to stiffener, weld No.ND1-STSA3-1-89M-1-15. The welder is identified as #040268. ZPMC QC is identified as Mr. Chen Xi. The welding variables recorded by QC appear to comply with WPS-B-T-2113.

SMAW in the 2F position for the Tower strut plate to stiffener, weld No.ND1-STSA3-1-89M-1-13. The welder is identified as #040268. ZPMC QC is identified as Mr. Chen Xi. The welding variables recorded by QC appear to comply with WPS-B-T-2112.

Bay #11

This QA Inspector observed the following work in progress:

SMAW in the 2G position for the Tower strut plate to stiffener, weld No.ND1-STSA3-1-89M-2-10A/B. The welder is identified as #049099. ZPMC QC is identified as Mr.Mao Bin Bin. The welding variables recorded by QC appear to comply with WPS-485-SMAW-2G(2F)-FCM-REPAIR-1.The repair welding report is T-CWR523.

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## WELDING INSPECTION REPORT

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SMAW in the 2G position for the Tower strut plate to stiffener, weld No.ND1-STSA3-1-99M-1-11A/B. The welder is identified as #049099. ZPMC QC is identified as Mr.Mao Bin Bin. The welding variables recorded by QC appear to comply with WPS-485-SMAW-2G(2F)-FCM-REPAIR-1.The repair welding report is T-CWR525. Ultrasonic Testing (UT)

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as Tower Strut T- joint.

The Weld Designation is as follows

ED1-STSA3-2-89M-1-003A /B  
ED1-STSA3-2-89M-1-010A /B  
ED1-STSA3-2-89M-1-011A /B  
ED1-STSA3-2-89M-1-024A /B  
ED1-STSA3-2-89M-1-061A /B  
ED1-STSA3-2-89M-1-064A /B

This QA Caltrans Quality Assurance (QA) Inspector, Subhasis Bera, observed ZPMC personnel performing Shielded Metal Arc Welding (SMAW) of partial joint penetration weld attaching a temporary lifting lugs plate to outside of West tower, lift 5, skin A (70 mm thickness), without sufficient base material preheat. This work was observed approximately 300mm from top of lift 5. This QA Inspector observed a 149 degree Celsius Tempilstik temperature indicator mark applied to the adjacent base material within approximately 30mm from the point of welding did not melt.

This QA Inspector generated an incident report for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 134-8257-0045, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bera,Subhasis	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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